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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,240	10/17/2003	Reinhold Opper	0275M-000769	2494

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EXAMINER

KERNS, KEVIN P

ART UNIT	PAPER NUMBER
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1725

MAIL DATE	DELIVERY MODE
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06/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/688,240	Applicant(s) OPPER, REINHOLD	
	Examiner Kevin P. Kerns	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-18, 34, 36, 37, 39-55, 57-59 and 61-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18, 34, 36, 37, 39-55, 57-59 and 61-63 is/are rejected.
- 7) ☒ Claim(s) 11, 13, 39-42, 57 and 61 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this instance, the abstract includes the legal term "means" in the 7th line, as well as phrases that can be implied, such as "The present invention relates to..."

Claim Objections

2. Claims 11, 13, 39-42, 57, and 61 are objected to because of the following informalities: in the 4th lines of claims 11 and 13, replace "the" with "a" before "processing" to obtain proper antecedent basis. In the 1st lines of claims 39-42, replace all instances of "positioning aid" with "system" to agree with corresponding independent claims. In claims 57 and 61, 3rd line from the end of the claims, insert "is" after "beam". In claim 61, 3rd line, delete "a" before "rivet". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1725

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-18, 34, 36, 37, 39-55, 57-59, and 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClay et al. (US 4,620,656) in view of Rantsch (US 3,130,633).

McClay et al. disclose a riveting system/apparatus, in which the system/apparatus includes a riveting device operable to rivet component(s), or workpiece(s) 10 (including highly contoured aircraft components – see column 9, lines 1-3) to establish permanent engagement between aircraft components (and capable of the same for automotive components – although it is noted that the automotive components are not given patentable weight in these apparatus claims), and operable to select one or more rivets (i.e. connecting elements) of correct size for the workpiece thickness detected by a thickness indicator, such that the selection of rivets are made on the basis of various types of rivet materials, diameters, lengths, head sizes etc. (column 8, lines 40-47) and are correspondingly provided in a plurality of supply tubes (45,46,47,48) of Figure 1 (column 16, lines 13-16); a light emitting element that operably produces a light beam (column 30, lines 40-64; and Figures 13-15) while being connectable to a processing device (programmable controller 105), or alternatively, a laser-guided dot sensing and riveter-positioning mechanism (column 10, lines 9-20); and a reference position of the light emitting element that enables alignment of the light beam towards a reference point (i.e. desired spot for placing a rivet) on the

component(s)/workpiece(s) 10, such that at least one rivet becomes connectable to the component(s)/workpiece(s) 10 at the reference point (abstract; column 1, lines 7-13; column 8, lines 17-68; column 9, lines 1-9 and 44-68; column 10, lines 1-8; column 15, line 30 through column 16, line 66; column 17, lines 63-68; column 18, lines 1-23 and 66-68; column 30, lines 40-64; column 35, lines 3-17; and Figures 1 and 13-15).

McClay et al. do not specifically disclose that the light beam is variably projectable or focusable (via a template attached to the light beam source) onto the component(s) in an obliquely-arranged manner.

However, Rantsch discloses an apparatus for fixing a point on the surface of a workpiece, in which the apparatus includes sources of light (9,9') that provide light beams while being operatively attached to a guiding member 4, such that the sources of light (9,9') are arranged obliquely (Figure 1); and templates (attached to the light beam source) in the form of projectors (5,5') that each include objective lenses (6,6') and condenser lenses (8,8') (i.e. device-related interference contour providing various slit, or elliptical, diameters and focal lengths to be projectable onto at least one component, or workpiece) that cooperate to variably project and/or focus a sharp, well-defined dot or area of light on workpiece 2 regardless of height of the workpiece 2, such that the variably projectable or focusable light beam (provided via a template attached to the light beam source) onto the component(s) in an obliquely-arranged manner is advantageous for fixing/locating a point of light on the surface of the workpiece with a sharp, well-defined dot or area of light (column 1, lines 11-14 and 30-72; column 2, lines 1-12 and 34-72; column 3, lines 1-54; and Figures 1-4).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the riveting system/apparatus that includes a riveting device operable to rivet component(s), as disclosed by McCloy et al., by using the variably projectable or focusable light beam (provided via a template attached to the light beam source) onto the component(s) in an obliquely-arranged manner, as taught by Rantsch, in order to fix/locate a point of light on the surface of the workpiece with a sharp, well-defined dot or area of light (Rantsch; column 1, lines 30-69).

Response to Arguments

5. The examiner acknowledges the applicant's amendment received by the USPTO on February 9, 2007. Upon further review, new abstract and claim objections are presented in above sections 1 and 2. The applicant has cancelled claims 56 and 60. Claims 11-18, 34, 36, 37, 39-55, 57-59, and 61-63 are currently under consideration in the application.

6. It is noted that allowable subject matter was previously indicated for all claims of record that are currently under consideration. However, upon further consideration, a new ground(s) of rejection is made in view of the new 35 USC 103(a) rejections set forth in above section 4. As a result, all of the applicant's arguments set forth in the previous office actions (as applicable) with respect to claims 11-18, 34, 36, 37, 39-55, 57-59, and 61-63 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan Johnson can be reached on (571) 272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns *Kevin Kerns 6/6/07*
Primary Examiner
Art Unit 1725

KPK
kpk
June 6, 2007